

CLAIMS

I claim.

1 1. A printing unit cylinder for a rotary printing machine, comprising a body  
2 made of a metallic material having a linear coefficient of expansion of about  $\alpha$   
3  $< 5 \times 10^{-6} \text{ K}^{-1}$  in a temperature range of from about  $20^\circ$  to about  $60^\circ$ .

1 2. A printing unit cylinder for a rotary printing machine according to claim  
2 1, wherein said metallic material has a linear coefficient of expansion of about  $\alpha < 1.5 \times 10^{-6}$   
3  $\text{K}^{-1}$  in a temperature range of from about  $20^\circ$  to about  $60^\circ$ .

3. The printing unit cylinder as claimed in claim 1, wherein said metallic  
material is an iron alloy having about 30% to about 40% nickel by weight.

4. The printing unit cylinder as claimed in claim 3, wherein said metallic  
material is an iron alloy having about 36% nickel by weight.

5. The printing unit cylinder according to claim 1, wherein the entire  
cylinder is made of said metallic material.

6. The printing unit cylinder according to claim 2, wherein the entire  
cylinder is made of said iron alloy.

7. The printing unit cylinder according to claim 3, wherein the entire  
cylinder is made of said iron alloy.

1                    8.     The printing unit cylinder according to claim 4, wherein the entire  
2 cylinder is made of said iron alloy.

1                    9.     The printing unit cylinder according to claim 1, wherein the body is  
2 made of a barrel as a central piece and two journals on either side of the barrel and only the  
3 barrel of said cylinder is made of said metallic material.

10.     The printing unit cylinder according to claim 2, wherein the body is  
made of a barrel as a central piece and two journals on either side of the barrel and only the  
barrel of said cylinder is made of said metallic material.

11.     The printing unit cylinder according to claim 3, wherein the body is  
made of a barrel as a central piece and two journals on either side of the barrel and only the  
barrel of said cylinder is made of said metallic material.

1                    12.     The printing unit cylinder according to claim 4, wherein the body is  
2 made of a barrel as a central piece and two journals on either side of the barrel and only the  
3 barrel of said cylinder is made of said metallic material.